

IV. REMARKS

1. Claims 1-7 remain in the application. Claims 1 and 4 have been amended.
2. An Information Disclosure Statement in accordance with 37 CFR 1.97 and 1.98 is included with this response.
3. The Abstract of the Disclosure has been amended to comply with MPEP 608.01(b) and section headings have been added to the specification in compliance with MPEP 608.01(a).
4. Applicants respectfully submit that claims 1, 2, 4, and 5 are not anticipated by Ishii et al. (US 5,923,829, "Ishii").

Ishii fails to disclose or suggest the following features of claim 1:

dividing the application programs stored in the memory cells at a given time into application programs to be maintained and application programs not requiring maintenance;

storing information on the location of each application program to be executed and information on the quantity of memory allocated by each application program to be executed; and

utilizing the operating system to determine on the basis of said stored information which of said memory blocks contains information requiring maintenance.

Ishii is directed to the storage of image data and not to application programs. Ishii describes a memory system

containing a determining unit that detects which area in an SDRAM image has data stored. The Office Action refers to Figure 6 and column 9, line 60 through column 10, lines 6 where only bank 0 of the SDRAM enters a power down mode. Bank 0 of the SDRAM stores data which should be maintained and a self-refreshing operation is automatically performed on bank 0 of the SDRAM to accomplish this. As a result, the refresh request, which is given externally, is invalidated. In contrast to this, a refresh operation is not performed on bank 1, which has no data to be maintained, in order to reduce power consumption. The Office Action also refers also to Figures 10 and 11 and column 11, lines 50-67 in which examples of timing charts of such a refreshing operation are shown. The refresh control unit has information indicating a position at which image information is stored and a time at which the image information is stored at that position i.e. this reference describes that some information is stored in the memory and, in addition, information on the storage position and a time when the information is stored. Hence, the control unit can refresh the right parts of the memory.

In the present patent application claim 1 contains the following features:

the information on the location of each application program to be executed is stored, as well as on the quantity of memory allocated by each application program to be executed; and

it is determined on the basis of said stored information which of said memory blocks contains information requiring maintenance.

The present application describes the present invention as being used in conjunction with application programs, as opposed to the reference where some information is stored as an image to the memory. Application programs are described in the present application as e.g. calendar updating and so on. Page 13, line 28 through page 15, line 3 of the present application describes situations in which the electronic device is provided with one or more operating systems or the like. Referring in particular to page 14 lines 12-17, the simultaneous use of several programs can have a significant effect on the quantity of memory allocated in a given time. Thus, the purpose and use of the present patent application are different than those of the reference.

Claim 4 is directed to similar subject matter.

At least for these reasons, Applicants respectfully submit that independent claims 1 and 4 and dependent claims 2 and 5 are not anticipated by Ishii.

5. Claims 3 and 6 are patentable over the combination of Ishii and Stolt et al. (US 5,721,860, "Stolt").

Stolt describes a memory controller for independently supporting synchronous and asynchronous DRAM memories. However, Stolt fails to supply the features missing from Ishii and therefore the combination of Ishii and Stolt fails to disclose or suggest all the features of Applicants' claims 1 and 4 from which claims 3 and 6 depend.


6. Claim 7 is patentable over the combination of Ishii and Baweja et al. (US 6,212,599, "Baweja").

Baweja describes a memory control system which includes a mobile system controller but otherwise fails to include any other features common to the present patent application. As such, Baweja fails to supply the features not disclosed by Ishii and the combination of Ishii and Baweja fails to disclose or suggest all the features of Applicants' claim 4 from which claim 7 depends.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


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